

A schematic diagram of a crystal lattice structure, likely representing a semiconductor material. The lattice is composed of two types of atoms, represented by white circles and shaded circles. The structure is shown within a rectangular frame. A horizontal dashed line with arrows at both ends is labeled $1B$, indicating a dimension or distance. Labels 11, 12, 13, and 14 point to specific atoms or groups of atoms within the lattice. Label 11 points to a white circle in the top left. Label 12 points to a shaded circle in the top left. Label 13 points to a white circle in the top center. Label 14 points to a dashed line connecting a group of atoms in the top right.

A cross-sectional view of a semiconductor device. The device consists of a base layer 18. On top of the base layer, there are several vertical elements. Each element includes a central core 13, surrounded by a layer 15, and an outer layer 16. The elements are separated by a material 17. The top surface of the device is covered by a layer 11. The vertical elements are labeled 111, 112, and 113. The central core is labeled 12. The outer layer is labeled 13. The layer surrounding the core is labeled 15. The outermost layer is labeled 16. The base layer is labeled 18. The material between the elements is labeled 17.

FIG. 2A

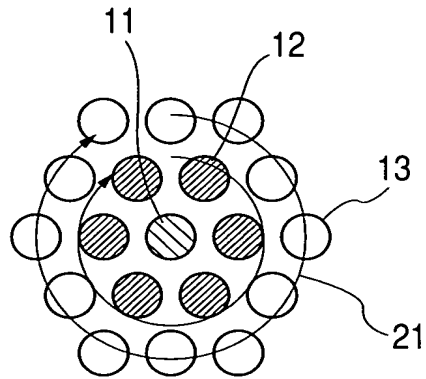


FIG. 2B

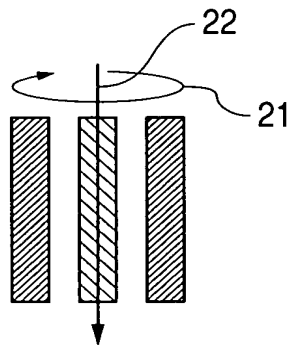


FIG. 2C

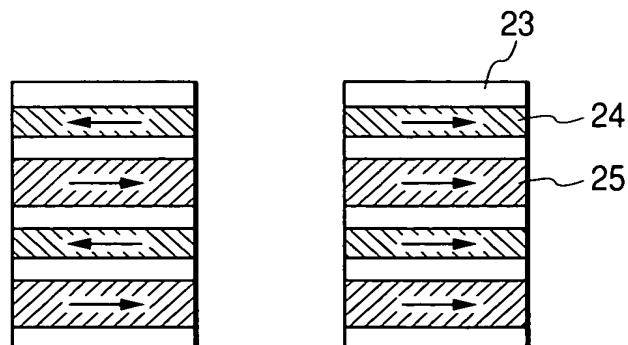


FIG. 3A

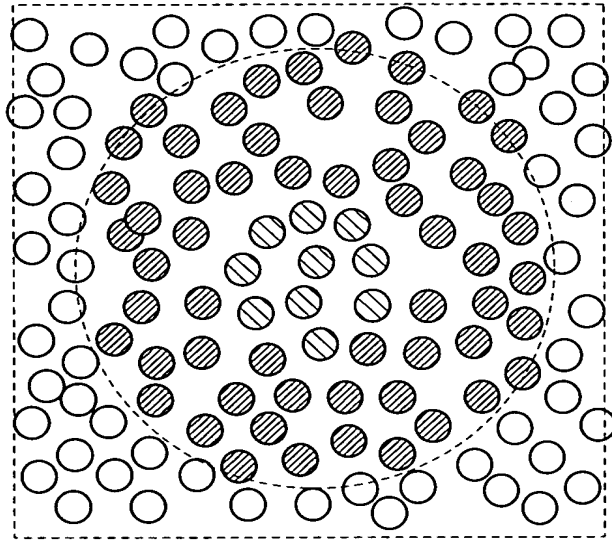


FIG. 3B

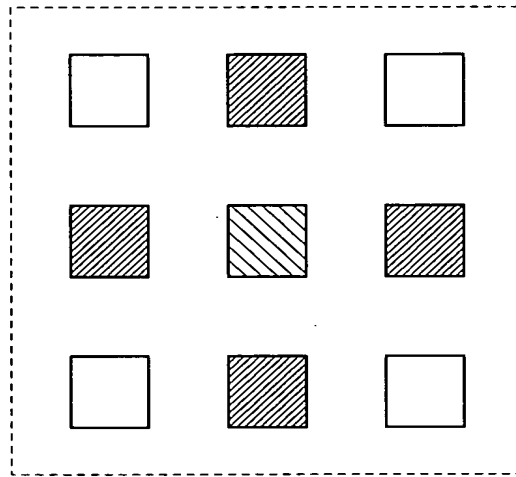


FIG. 3C

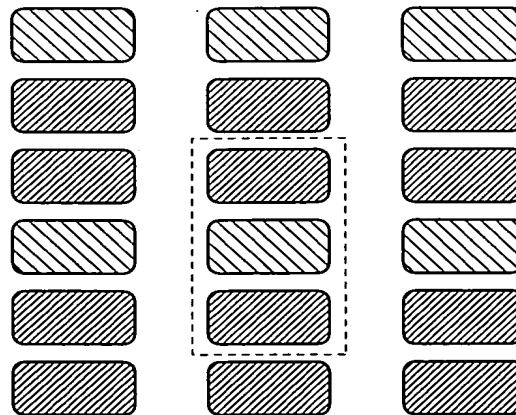


FIG. 4A

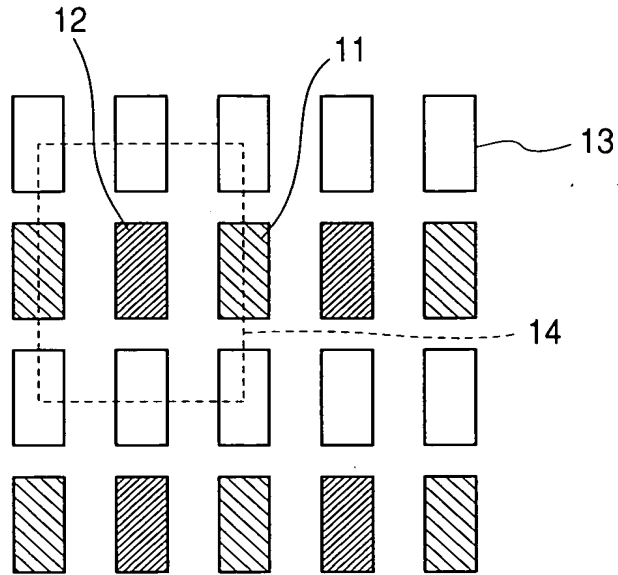


FIG. 4B

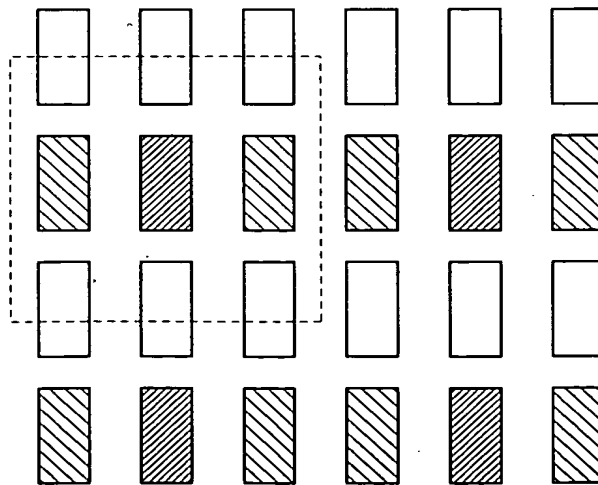


FIG. 5A

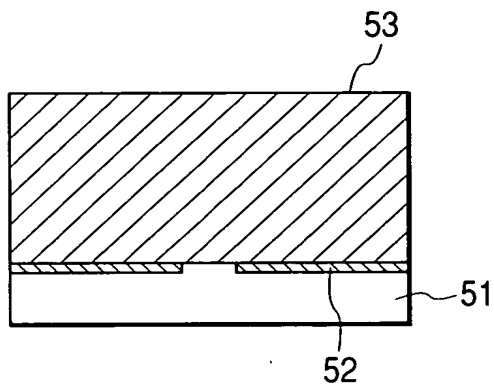


FIG. 5D

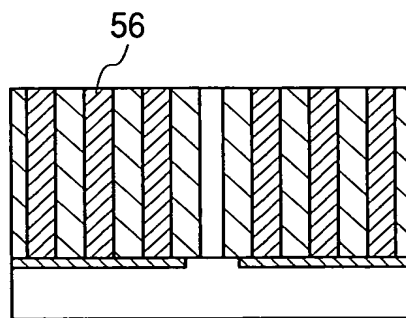


FIG. 5B

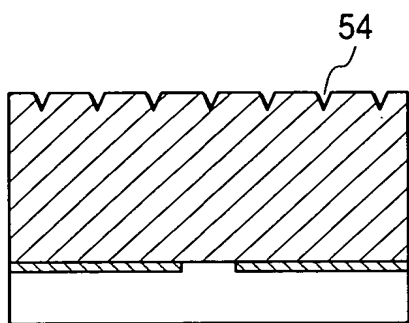


FIG. 5E

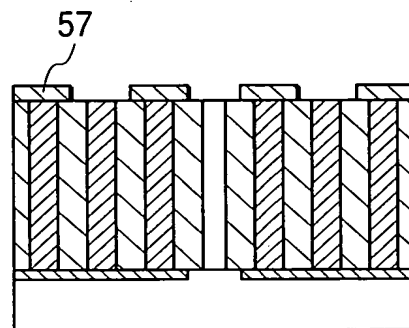


FIG. 5C

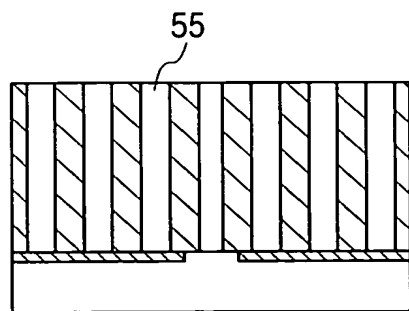


FIG. 5F

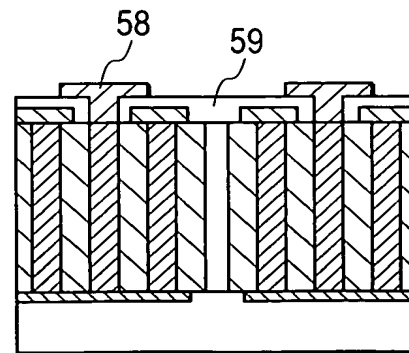


FIG. 6